Title: Some possibilities of heteroskedasticity modeling with applications to non-life insurance

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Abstract:

This thesis deals with the possibilities of modeling heteroskedasticity using generalized linear models. It summarizes the assumption for these models and their application in practice. It shows the practical need for these models. Furthermore, the thesis deals with the modeling of variance using other methods than generalized lienar models - such as generalized additive models or local regression. Comparison of methods is graphically demonstrated.

Keywords: Dispersion parameter, variance function, Joint modelling of mean and dispersion